

Ivory Coast : Amede Koffi Kouakou nominated Minister



Mr. Amedee Koffi Kouakou, director of FISUEL has just been appointed, on 11th of January 2017, Minister of Economic Infrastructures in the new Ivorian government.

The announcement was made by Patrick Achi, new Secretary General of the Ivory Coast Presidency.

The Chairman, the Board of Directors and all the members of FISUEL congratulate him and wish him good luck in this new responsibility.



New member – Schneider Electric

Life Is On



Schneider Electric is the global leader in energy management and automation. The Group's 160,000 employees serve customers in over 100 countries, helping them to manage their energy and processes in ways that are safe, reliable, efficient and sustainable.

From the simplest of switches to the most complex operating systems, its technologies, software, and services enable customers to optimise the management and automation of operations.

Schneider Electric is involved in ongoing research aimed at ensuring the safety of goods and people, and offers increasingly innovative solutions. The launch of D'Clic Arc on the French market in 2014 confirms this commitment. D'Clic Arc, the first smart circuit breaker, boosts protection against the risk of fire in the home by identifying the appearance of electrical arcs, which cause fires to start, and by automatically isolating the circuit concerned before the first spark appears.

Schneider Electric is also actively involved with Gimelec and IGNES (French Digital, Energy, and Security Industries) in order to encourage the development of standards, and the adoption of guidelines aimed at ensuring electrical safety.

As a major player, and a recognised expert in the electrical industry, Schneider Electric supports professionals in the sector, in order to provide them with the resources to understand changing standards, and offers them training courses focused on implementing those standards.



Senegal : a project of 120 MW of sun production by 2018



The photovoltaic solar power plant in Bokhol was inaugurated in October 2016 by President Macky Sall. In 2014, a strategy for economic and social development was launched with the Emerging Senegal Plan (PSE), whose energy is one of the main pillars for growth and development, Energy mix to strengthen the production and distribution capacities of SENELEC.

The goal is to increase power and reduce the cost and hours of power cuts.

The photovoltaic solar power plant in Bokhol, built in 6 months, has a capacity of 20 MW. It is the result of a public-private investment.

Thanks to this plant, more than 160,000 people will have access to electricity.

It is complemented by the 20 MW solar power plant in Malicounda, which will supply electricity to nearly 9,000 households.

Other solar projects are in progress, all of the same capacity, at Santhiou Mekhé, Mérina Dakhar, Kahone and Diass or in wind power at Taïba Ndiaye.



France : The photovoltaic roads



The photovoltaic road, a world first, was launched in France in October 2016. Photovoltaic cells, in the form of tiles, are glued on roads or in car parks.

This kilometer of photovoltaic road should make it possible to produce the equivalent of a public lighting of a city of 5,000 inhabitants. With 2.5% of the roads covered by this road cover, this would ensure 10% of France's energy needs.

Four other sites are experimented in France, on car parks or in front of public buildings.

A bike lane in the Netherlands has also been in operation for 2 years and many reflections are being launched in other countries.

There are many applications: public lighting, powering of electric vehicles, Light displays for bus shelters or red lights, or housing needs in sparsely populated areas



ONSE : National Observatory of electrical safety in France



In annex, you will find the brochure from ONSE, transcribing the average data over 5 years, shared by all the members of this organization. This makes them well on credible and perennial. It is the fruit of 4 years of work carried out by nearly 70 experts and based on more than 200 surveys.

These data relate to dwellings fires, electrical damage and accidents. On the newsletter of December 2016, mention was made of the relationship between the reduction in the number of electrocutions and the regulation. This French model will be presented at the next GAM (General Annual Meetings) of Fisuel in Indonesia in May 2017.

This will allow, if it is taken up in countries, to compare the data and thus to transcribe local strategies with electrical safety finality.

We will have the opportunity to have a very strong "statistical" session in Indonesia. This theme "statistics" is one of the main strategic orientations of FISUEL 2017.

A new, more detailed and up-to-date presentation of the "Worldwide Safety Barometer" website will be made in order to show its richness and importance at the world wide level. To accompany this presentation, there will be the French ONSE model, but also other presentations from different regions of the world. They will concern on the one hand the situation of dwellings fires and electrical accidents but also on local regulations.

→ Any proposals on this subject can be sent to fisuel@fisuel.org or patrick.aubelis@fisuel.org.



IEC : International Electrotechnical Committee

IEC 60364-6: Low voltage electrical installations – Part 6: Verification Edition 2.0 2016-04



This part of IEC 60364 provides requirements for initial and periodic verification of an electrical installation.

Clause 6.4 provides requirements for initial verification, by inspection and testing, of an electrical installation to determine, as far as reasonably practicable, whether the requirements of the other parts of IEC 60364 have been met and requirements for the reporting of the results of the initial verification.

The initial verification takes place upon the completion of a new installation or completion of an addition or an alteration to an existing installation.

Clause 6.5 provides requirements for periodic verification of an electrical installation to determine, as far as reasonably practicable, whether the installation and all its constituent equipment are in a satisfactory condition for use and requirements for the reporting of the results of the periodic verification.



Visit of Japanese Consultant in France



Deloitte Tohmatsu Consulting LLC is an energy consulting company based in Japan. In November 2016, the Ministry of Economy, Trade and Industry (METI) commissioned them to study, how to ensure long-term electrical safety operations in Japan.

The objective of their visit was French regulation in terms of electrical safety and the qualification of the installors in terms of training and processes.

Under the aegis of Fisuel, a delegation from Japan came to France on December 5th to meet with the Promotelec Association, CONSUEL and ENEDIS.

It was an opportunity to present the situation of the dwellings stock in France in 2015, the regulation concerning electrical installations in new and old dwellings over 15 years old, electrical diagnostics and the results of the work of ONSE (national observatory of electrical safety).



General Annual Meeting 2017 of FISUEL, in Indonesia hosted by Konsuil and Alperklinas

<p>Date of the GAM</p>	<div style="display: flex; align-items: center;">  <div> <p>The 2017 General Annual Meeting (GAM) will take place in Indonesia hosted by Konsuil and Alperklinas from May 8th to 12th, 2017.</p> <p>The event will include the meetings of the 3 working groups (Europe, Africa and Asia/Pacific), the Board, the General Assembly, the symposium and a visit.</p> <p style="text-align: right; color: red;"><i>Save the dates</i></p> </div> </div>															
<p>Dates for the events</p>	<table border="0" style="width: 100%;"> <tr> <td style="width: 40%;">Board meeting :</td> <td style="width: 20%;">1st day</td> <td style="width: 40%;">Monday 8th of May</td> </tr> <tr> <td>3 Working Groups meetings:</td> <td>2nd day</td> <td>Tuesday 9th of May AM</td> </tr> <tr> <td>General Assembly :</td> <td>2nd day</td> <td>Tuesday 9th of May PM</td> </tr> <tr> <td>Symposium :</td> <td>3rd, 4th days</td> <td>Wednesday 10th & Thursday 11th of May</td> </tr> <tr> <td>Technical visit :</td> <td>5th day</td> <td>Friday 12th of May</td> </tr> </table>	Board meeting :	1st day	Monday 8 th of May	3 Working Groups meetings:	2nd day	Tuesday 9 th of May AM	General Assembly :	2nd day	Tuesday 9 th of May PM	Symposium :	3rd, 4th days	Wednesday 10 th & Thursday 11 th of May	Technical visit :	5 th day	Friday 12 th of May
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<p>Fisuel Key subjects</p>	<ul style="list-style-type: none"> - Access to electricity for all in complete safety: Residential, Tertiary, ... - Worldwide statistics (fires and accidents with electricity source) - Fight against deceit products (counterfeiting and dangerous products) - Communication and testimonies: (safety, installors qualification, ...) - Slum electrification in all safety 															
<p>Sponsors & speakers</p>	<p>- Any contributions as sponsors or speakers whose subject matter would be consistent with the above paragraph should be sent to Mulianto Gultom (muliantogultom@yahoo.co.id) and to Patrick Aubelis (patrick.aubelis@fisuel.org)</p>															
<p>Reservation</p>	<p>- All documents required for registration and reservations are in progress.</p>															



If you have topics you would like to share with the recipients of the FISUEL newsletter, let send us a page with photos at the e-mail address fisuel@fisuel.com

The Newsletter is available on the website: www.Fisuel.org.





ACT NOW

- **By taking part** in our workshops
- **By contributing to** the functioning of the structure
 - **By sharing** data with the Observatory
 - **By attending** the next restitution of data



To contact us: contact@onse.fr



FRENCH NATIONAL OBSERVATORY OF ELECTRICAL SAFETY



► For 20 years, Promotelec Association and Consuel gathered committed actors to share data in order to analyze and improve the electrical safety

Nowadays, many electrical damages are still due to electrical source



DWELLING FIRES/YEAR



200,000 dwelling fires
responsible for

300 fatalities and **15,600** injuries
among them



82,000
fires with
brigade interventions



50,000
fires due to electrical source:

- **61%** related to electrical equipment
- **36%** related to fix or mobile installations
- **3%** related to installations in common parts or to energy distribution

ELECTRICAL ACCIDENTS/YEAR



3,000 people
electrification casualties
40 people
electrocution casualties

ELECTRICAL DAMAGES/YEAR



400,000
Due to:

- lightning, overvoltage, overload,
- heating,
- failure of a component,
- electric default

ECONOMICAL CONSEQUENCES/YEAR

For dwelling fires,
estimated to **4,2 billion €**
of which **1 billion €** for fires
due to electrical source

For electrical
damages and accidents
estimated close to
1,6 billion €

KEY DATA

METROPOLITAN FRANCE IN 2015

35 million dwellings among
which
29 million over 15 years

DWELLINGS with electrical installations over 15 years

- **2/3** of the electrical installations do not comply with at least 1 of 6 mandatory safety points*
- **80%** with a defective earth connection
- **60%** with a bad equipotential connection and a safety zone of the bathroom not respected
- **60%** present risks of direct contacts with live elements
- **50%** own obsolete devices

COMMON PARTS: electrical installations

- **75%** present hazards of direct contacts with live elements
- **50%** present hazards of indirect contacts with live elements



In 41 years,
the number of electrocutions/year
was divided by 5,
going from 200 to 40



Thanks to the evolution of the regulations:

- Decrees on the protection of the workers in 1962
- The NF C 15-100 standard and the earth connection in 1969
- The electrical switchboard in 1980
- The 30mA earth leakage device in 1991
- The mandatory electrical diagnosis (DEO) for over 15 years dwelling sale in 2009
- The DEO for dwelling rental from 2017



Direct correlation
between regulation and
decrease of the accidents



IEC 60364-6

Edition 2.0 2016-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Low voltage electrical installations –
Part 6: Verification**

**Installations électriques à basse tension –
Partie 6: Vérification**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

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